

# VEHICLE COOLING SYSTEM

## Abstract

An integrated cooling system having two separate evaporator coils is provided. Each evaporator coil has its own shutoff, thereby allowing for individual control over the cooling of each of two vehicle spaces. The evaporator coils may be disposed within the vehicle to cool the passenger compartment and a battery compartment, respectively. The separate control afforded by the cooling system provides the flexibility of shutting off cooling to the vehicle passenger compartment for the comfort of the vehicle occupants, while still providing cooling to the battery, as needed. The cooling system includes a number of control features which provide for automatically shutting off cooling to one or more of the evaporator coils based on parameters such as air temperature and refrigerant pressure.